

the Southwest. There was some delay to haying, particularly in central-northern parts, but in more western sections there was practically no interruption. Livestock continued in generally good condition in all sections.

Potatoes made mostly good advance throughout the month, except for some complaints of wet soil in the Ohio Valley and Lake region. Truck crops made good progress generally, although there was some slow growth due

to cool weather in northern parts. Rains interfered with tobacco transplanting in central parts, but in other sections there was satisfactory progress. Sugar cane and sugar beets made good advance, although it was too cool for best growth of beets in Wyoming at the close. Citrus and deciduous fruits were generally satisfactory during the month.

## WEATHER ON THE ATLANTIC AND PACIFIC OCEANS

### NORTH ATLANTIC OCEAN

By F. A. YOUNG

June, next to July, is normally the quietest month of the year over the North Atlantic, and, taking the ocean as a whole, the current month was no exception to the general rule. The weather conditions differed greatly, however, in different localities, as over the middle and eastern sections of the steamer lanes gales were reported on from 1 to 3 days, while at the time of writing no reports have been received showing a wind force of 8 or over west of the fifty-fifth meridian, with the exception of a disturbance on the 30th between Hatteras and New York.

The North Atlantic high and Icelandic low were both comparatively inactive during the greater part of the month, and at times unusually low pressure in the vicinity of the Azores was responsible for unfavorable weather in that region.

Charts VIII to XI show the conditions from the 15th to 18th, inclusive, during the flight of the airplane *Friendship* with Stultz, pilot, Gordon, mechanic, and Miss Earhart on board, and also the two days previous to the flight, which began on the 17th and ended on the 18th.

TABLE 1.—Averages, departures, and extremes of atmospheric pressure at sea level, 8 a. m. (seventy-fifth meridian), North Atlantic Ocean, June, 1928

Stations	Average pressure	Departure <sup>1</sup>	Highest	Date	Lowest	Date
	Inches	Inch	Inches		Inches	
Julianehaab, Greenland.....	30.01	(?)	30.28	14th....	29.76	27th.
Belle Isle, Newfoundland.....	29.83	-0.01	30.12	21st....	29.34	11th.
Halifax, Nova Scotia.....	29.94	+0.01	30.20	29th....	29.58	1st.
Nantucket.....	29.92	-0.07	30.14	11th <sup>2</sup> ...	29.64	2d.
Hatteras.....	29.97	-0.04	30.12	12th <sup>2</sup> ...	29.78	7th.
Key West.....	29.99	-0.01	30.06	14th....	29.88	16th.
New Orleans.....	29.96	+0.01	30.08	15th....	29.76	3d. <sup>3</sup>
Cape Gracias, Honduras.....	29.86	-0.01	29.90	30th....	29.82	3d. <sup>3</sup>
Turks Island.....	30.05	-0.04	30.12	2d <sup>3</sup> ....	29.98	30th.
Bermuda.....	30.15	+0.05	30.32	4th....	29.98	17th.
Horta, Azores.....	30.05	-0.16	30.36	14th....	29.60	7th.
Lerwick, Shetland Islands.....	29.75	-0.05	30.35	1st....	29.21	10th.
Valencia, Ireland.....	29.88	-0.12	30.36	15th....	28.88	9th.
London.....	29.94	+0.01	30.29	2d....	20.40	9th.

<sup>1</sup> From normals shown on Hydrographic Office Pilot Chart, based on observations at Greenwich mean noon, or 7 a. m. seventy-fifth meridian.

<sup>2</sup> No normal available.

<sup>3</sup> And on other date or dates.

Fog was unusually prevalent over the Grand Banks and along the American coast north of the thirty-fifth parallel, being reported on from 19 to 23 days in these localities. Fog was also observed on from 3 to 6 days over the middle and eastern section of the steamer lanes and on 1 day off the west coast of Florida.

On the 2d a moderate depression was central near 40° N., 15° W.; this moved slowly northeastward and on the 10th and 11th was over the North Sea. On the 2d and

3d moderate gales prevailed over a limited area between the Madeiras and fortieth parallel, and on the 9th between the Irish coast and tenth meridian. On the 7th and 8th moderate gales were also reported by vessels between the Azores and fortieth meridian.

On the 11th a shallow depression was central near 47° N., 30° W.; and on the 12th and 13th moderate weather with slight pressure gradients prevailed generally. On the 14th two disturbances of no great force were over the ocean; the first central near 43° N., 45° W., and the second over the English Channel, while moderate gales occurred near the centers of both.

By the 15th, as shown on Chart VIII, the western low had moved but little, but the storm area on that day was by far the most extensive of the month, reaching from the thirtieth to fifty-fifth meridians and thirty-fifth to forty-fifth parallels, with a region of comparatively moderate winds between the thirty-fifth and forty-fifth meridians.

As shown on Charts X and XI, moderate weather prevailed generally on the 17th and 18th, the conditions on the 19th being similar.

On the 20th a low was central near 50° N., 35° W., accompanied by moderate westerly gales; this moved eastward and on the 23d was off the east coast of Scotland. On the 21st strong westerly gales were encountered near 50° N., 25° W., and on the 22d northerly winds of equal force occurred near 58° N., 19° W.

Capt. E. Richter, of the German S. S. *Concho* (ex-American), from Baltimore to Danzig, reports that on June 23, in 46° 39' N., 29° 33' W., he met an unusually heavy storm from the east by south. It began at noon, with continuous heavy rain. The wind held in the same direction until 2 a. m. on the 24th. The rain stopped at 11 p. m. on the 23d and the wind suddenly shifted to south-southwest, force 6. At 3 a. m. a few bright stripes were seen in the northwest, when a thick fog came up. After an hour it suddenly cleared and the wind blew very hard from the northwest. The lowest barometer, 29.38 inches (uncorrected), occurred at 2 a. m. on the 24th.

On the 24th and 25th a disturbance was again over the eastern section of the steamer lanes, the storm area extending from the fifteenth to thirtieth meridians on the former date, and from the Irish coast to the twentieth meridian on the latter. On the 26th a number of land stations on the coast of Great Britain reported northerly to westerly winds of force 7 and 8.

From the 27th until the end of the month moderate conditions were the rule, although on the 27th and 28th a few vessels in the eastern section of the steamer lanes reported moderate southerly gales, and on the 30th the only disturbance of the month in American waters occurred off the coast between Hatteras and New York, as shown by storm report in table from Am. S. S. *Gulfsking*.